

± 4.19 , $p < 0.0001$), synovitis in the suprapatellar recess (8.83 ± 4.22 , $p = 0.009$), and medial parapatellar recesses (9.15 ± 4.20 , $p = 0.042$) v.s those patients that did not have.

Stiffness score in WOMAC questionnaire was affected by the presence of lateral osteophyte (4.02 ± 1.95 , $p = 0.001$) and the functional capability was modified because of the presence of lateral osteophyte (32.54 ± 13.74 , $p < 0.0001$), medial osteophyte (32.17 ± 14.4 , $p < 0.0001$) and synovitis in the suprapatellar recess (31.72 ± 14.26 , $p = 0.001$).

Conclusions: -In our population, the most frequent US finding was quadriceps enthesophytes. Suprapatellar synovitis was found in more than half of the patients with symptomatic KOA. There was a relationship between the number of pathological US findings and pain (namely when walking and going up stairs), stiffness and functional ability scores.

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AFRICAN-AMERICAN/WHITE AND GENDER DIFFERENCES IN ARTHRITIS IMPAIRMENT: A POPULATION-BASED STUDY

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Purpose: Studies suggest that some minority groups, especially African-Americans with osteoarthritis, may be at risk for higher rates of pain and disability compared to Caucasian Americans. In addition, African-Americans are less likely to undergo arthroplasty compared to Caucasian Americans. Some studies show that female gender is associated with arthritis impairment. However, more research needs to be done to evaluate the role of age, gender, socioeconomic status, and other predictors of arthritis impairment among minorities and Caucasian Americans.

Methods: The findings from the population-based 1998 National Health Interview Survey (N=30,534 adults) were used. Descriptive and correlational procedures evaluated possible Black/White differences in arthritis impairment related to walking ¼ of a mile without special equipment.

Results: The null hypothesis was mostly rejected. African-American women with household incomes less than \$20,000 who report that arthritis impairs their daily activities were more likely than Caucasian-American and African-American men with arthritis impairment in different income groups to be unable to walk ¼ of a mile without special equipment. For example, African-American women with household incomes less than \$20,000 who report that arthritis impairs their daily activities were more likely than Caucasian-American and African-American men with arthritis impairment in different income groups to be unable to walk ¼ of a mile without special equipment, after adjusting for age ($r = +0.213$, $N = 340$, $p < 0.000$). Among Caucasian-American women with household incomes at or above \$20,000, arthritis impairment also was positively correlated with being unable to walk ¼ of a mile without special equipment, after adjusting for age. However, this partial correlation was very low ($r = +0.047$, $N = 3,150$, $p < 0.008$).

Conclusions: These findings highlight the need to screen for and aggressively manage arthritis-related pain and disability among women, especially low-income African-American women.

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MODELING BLOOD PRESSURE CHANGES ASSOCIATED WITH LUMIRACOXIB VS IBUPROFEN INTO LONG-TERM CARDIOVASCULAR AND CEREBROVASCULAR OUTCOMES AND COSTS

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Purpose: Hypertension is a common comorbidity among patients with osteoarthritis (OA). Traditional NSAIDs used to treat OA are known to increase blood pressure or to attenuate the effect of antihypertensive medications. The goal of this analysis was to model the 24 hr systolic ambulatory blood pressure (SABP) profile into long-term cardiovascular outcomes of a hypothetical cohort of 100,000 controlled hypertensive OA patients treated with lumiracoxib 100 mg versus ibuprofen 600 mg tid.

Methods: SABP profile was based on results from a 4-week clinical trial which showed significant changes associated with ibuprofen (+ 2.2 mmHg) vs lumiracoxib (-2.7 mmHg). Framingham risk equations were used in an interactive Excel-based model to extrapolate these results over a 10-year period and predict the relationship between SABP changes and the development of coronary heart disease (CHD), cerebrovascular disease (CVD) and congestive heart failure (CHF). Inputs in the model included common risk factors (age, gender, cardiovascular disease, diabetes, left ventricular hypertrophy, total/HDL ratio, smoking, and atrial fibrillation), change in 24 hr SABP, and acute and post-event costs for each of the outcomes of interest obtained from published sources. Modeled outcomes included the number of events and the associated costs of managing these events in ibuprofen and lumiracoxib-treated hypertensive OA patients.

Results: Table shows outcomes and costs in a cohort of 100,000 patients with the following characteristics: 64 yrs; female, baseline SABP 127mmHg; total/HDL ratio 4.7; and negative history of smoking, cardiovascular disease, left ventricular hypertrophy, atrial fibrillation, or diabetes.

	Ibuprofen	Lumiracoxib	Events Avoided
# MI events	8,761	8,201	560
# Stroke events	5,997	5,244	753
New CHF diagnoses	1,682	1,659	23
Total CV-related deaths	4,759	4,332	427
			Costs Avoided
MI Costs	\$141,374,086	\$132,215,429	\$9,158,656
Stroke Costs	\$242,578,501	\$212,080,895	\$30,497,606
CHF Costs	\$59,005,390	\$58,152,872	\$30,497,606
Total Costs	442,957,977	\$402,449,196	\$40,508,780

Conclusions: Modeling of differential treatment effect on clinical trial blood pressure data showed that treatment of OA with lumiracoxib vs a traditional NSAID in a hypertensive population results in significant cardiovascular events avoided and reduced costs. Future work should address how clinic blood pressure measures affect results relative to the ambulatory measures used here.